

Cornwell (H. G.)
WITH THE COMPLIMENTS OF
THE AUTHOR.

E. JOY JEFFRIES, M.D.
BOSTON.
15 CHESTNUT ST.

OBSERVATIONS
ON THE
TREATMENT OF BLEPHAROSPASM.

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BY HENRY G. CORNWELL, M. D. YOUNGSTOWN, O.

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OBSERVATIONS ON THE TREATMENT OF BLEPHAROSPASM.

BY HENRY G. CORNWELL, M. D., YOUNGSTOWN, OHIO.

It is desired in this brief paper to bring to notice a few points of practical importance in the management of an obstinate and distressing affection of the eye-lids, viz., *blepharospasm*—a tonic spasm of the palpebral sphincter muscle, dependant upon an excitation of the sensory filaments of the *tri-facial nerves* distributed to the globe and conjunctiva, having its origin in many of the superficial affections of the cornea and conjunctival membrane. To the surgeon, the addition of such a condition to phlyctenular, or other irritative inflammatory diseases of these membranes, e. g., keratitis, or conjunctivitis; central or marginal ulcers of the cornea, granular lids, etc., becomes exceedingly troublesome, and interferes with the proper application of surgical means for the relief of the co-existing affection.

This disease can hardly be considered an affection peculiar to childhood and youth, although it is frequently found associated with those diseases of the eye-ball and lids which are largely met with at such periods. It is not rarely a sequel of some mechanical irritation, as from the presence of foreign bodies in the conjunctival sac, etc. The hyper-sensitive condition of the terminal twigs of the fifth pair of nerves ramifying in the cornea and conjunctiva thus induced, brings about a strong spasm of the orbicular muscle, due to a reflex neurosis dependent upon irritation when the eye is exposed to the stimulating influence of the air, or bright light. An instantaneous contraction of the orbicularis follows the irritation consequent upon such an exposure. The lids are tightly locked together, perhaps for weeks; the patient during this time being required, owing to the marked intolerance of light with which it is accompanied, to have the eyes kept closely bandaged, or remain in a dark or shaded room. The lids can only be made to separate for a second, an act which excites severe pain; the cornea is drawn up

under the upper lid, and the eye instantly fills with scalding tears. This can only be accomplished after a violent effort; a deep inspiration is taken, and the eyes carefully guarded from the light by the open hands—instantaneous contraction follows.

The diseases with which it is associated vary exceedingly in importance. Small corneal ulcers; phlyctenular conjunctivitis or keratitis, with but slight circum-corneal injection, may have co-existing with it, this distressing orbicular spasm and photophobia, the latter condition being dependent upon a developed hyperæsthetic condition of the retina.

This affection is usually more prominent in persons of impaired nutrition. Children, among whom, in city life, more especially the hygienic influence of air and baths are apt to be neglected. The little patient is brought before the surgeon, the head bent on the chest, the eyes closely covered with a heavy bandage or veil. In most instances, this spasmodic condition is associated with an impaired condition of the general health, and disordered digestion. This form is designated as *scrofular blepharospasm* (Schweigger). Children of from six to ten years of age, living in unrestricted luxury on pastry, pickles, preserves, tea, and coffee, until with pallid and cachectic appearance, they are brought to our notice through the influence of a corneal or conjunctival disease, and a vexatious blepharospasm.* An examination usually proves unsatisfactory, as the patient is unable to open the eyes without being subjected to the narcotic influence of ether or chloroform. The parents report that the child is unable, owing to the severe pain which it occasions, to be exposed to the light; that it seeks darkened corners, or hides its face in the bed clothing. Often about the edges of the lids (the lower more particularly,) the nostrils and lips, are found herpetic scabs, indicative of mal-nutrition—a condition popularly known as “*scrofula*.”

* “I will tell you, HONESTLY, what I think is the whole cause of the complicated maladies of the human form: it is their GORMANDIZING and STUFFING, and STIMULATING the digestive organs to excess, thereby creating IRRITATION. The STATE of their mind is another grand cause—the fidgetting themselves about that which cannot be helped; passions of all kinds; malignant passions and worldly cares pressing on the mind, disturb the central action, and do a great deal of harm.”—DR. ABERNETHY.

This spasmodic affection is also brought about in exceptional cases through irritation of the recurrent branches of the fifth pair, due to carious teeth, tumors, etc. In the greater number of cases the condition is largely dependent upon hysteria, the spasm being out of all proportion to the local disease from which it had its origin. In this it closely resembles vaginismus, and the same can frequently be said of it, that "in some cases no lesion of surface, no inflammation can be discovered; and we are driven to the conclusion that the spasmodic irritability is due to hysteria, or simple hyper-æsthesia, or to emotional influences."—BARNES.

The therapeutics of this affection are to be directed toward the removal of the cause—the co-existing disease—and the treatment of the spasm itself, which has now become, although only symptomatic of the former condition, the more important of the two. Among the numerous plans of treatment proposed, those in frequent use are: dashing cold water into the face, or plunging the head into a cold bath; soothing embrocations to the external surface of the lids; the internal administration of conium or belladonna; counter-irritation by means of cantharidial collodion to temples, forehead, or mastoid process; sub-cutaneous injection of some of the salts of morphia in the region of the nerve stems, (Graefe); sub-cutaneous division of the supra-orbital nerve trunk, (Romberg); application of the electric current, (Remak); canthoplasty, (Agnew); penciling the eruptions about the edges of the lids with the compound stick of nitrate of silver and nitrate of potash, (Noyes). Idiopathic blepharospasm (Arlt) is chiefly due to hysteria, and requires that plan of treatment to be followed suitable for such affections.

It is more particularly the purpose of this paper to bring to notice a plan of treatment which I have introduced in the management of this affection, which has superseded, in my hands, the effect of any other I have tried, and has been productive of the same good results in the practice of surgeons in ophthalmic practice, to whom I have suggested it.* For this orbicular spasm, I employ

* Vide observation of Dr. D. B. Smith, on a verbal communication made by the author, of this method of treatment, in a paper on "The Progress of Ophthalmology," read before the Ohio State Medical Society, in session at Columbus, Ohio, 1878.

forcible stretching of the *sphincter palpebrarum*. My attention was called to the use of such a method of treatment by the success of forcible stretching of sphincter muscles in vaginismus and spasmodic affections of the anus. During my term of service as resident surgeon, Brooklyn Eye and Ear Hospital, induced by these points, it became my practice to stretch apart to their widest extent, with the thumbs on their external surface, the lids of all patients, when this condition was present. The eyes of all resident patients, among whom irritations of the globe from roughened conditions of the mucus lining of the lids had brought about this spasm, were, in addition to the usual applications made, several times a day at my hands subjected to this treatment. More recently I have, after full anæsthesia from chloroform or ether, dilated the orbicularis to its full extent, fixing it in this position by means of a speculum for some moments; when much irritation of the cornea was present, introducing a few drops of *atropinized castor oil*, when the patient was gradually allowed to recover from the anæsthesia, and the instrument then removed.

The favorable effect of this method of treatment is perhaps due to the combined influence of the forcible and continued stretching, thus breaking up the spasmodic tendency, and to the *hyper-sensation* of the ocular branches of the tri-facial nerves becoming obtunded by exposure to the air.

Whatever the local treatment, attention to the general health of the patient is of prime importance. *Scrofula* in children too often means disordered digestion from unrestricted liberties at the table. Tea and coffee should form no part of children's diet. The so-called "scrofulous" child will, if inquiry is made, be found to be one who, through the indulgence of its parents, eats pastry, pickles, preserves; drinks tea and coffee, to the exclusion of, for them, more easily digested diet. Regular baths, plenty of sun-light, and an abundance of "*God's pure oxygen*" is the modern and humane hygienic treatment of youth.

